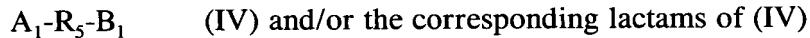


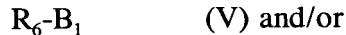
- A represents an amine or amine salt functional group, or an acid, ester, acid halide or amide functional group,
- B represents an amine or amine salt functional group when A is an acid, ester, acid halide or amide functional group, or B is an acid, ester, acid halide or amide function group when A is an amine or amine salt functional group,

and at least one bifunctional monomer of the following formulae II to IV, and optionally, a monofunctional monomer of the following formulae V or VI; or a prepolymer obtained from at least one bifunctional monomer of the following formulae II to IV and, optionally, at least one monofunctional monomer of the following formulae V or VI,

- the bifunctional monomers satisfying the following general formulae:



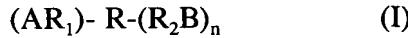
- the monofunctional monomers satisfying the following general formulae:



in which

- A_1 , B_1 may be identical or different and represent an acid, ester or acid chloride functional group, an amine functional group or an amine salt,
- R_3 , R_4 , R_5 may be identical or different and represent linear or branched alkyl hydrocarbon radicals or cycloaliphatic radicals optionally including unsaturated groups,
- R_6 , R_7 may be identical or different and represent aromatic, linear or branched, alkyl hydrocarbon radicals or alkylaryl arylalkyl or cycloaliphatic radicals optionally including unsaturated groups.

17. (Amended) Thermoplastic copolyamide resulting from the reaction between at least one polyfunctional monomer satisfying the following general formula I:

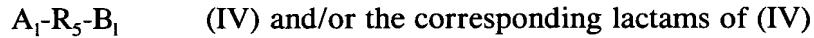
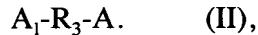


in which:

- n is an integer greater than or equal to 2,
- R_1 , R_2 may be identical or different and represent a covalent bond or an aliphatic, arylaliphatic, aromatic or alkylaromatic hydrocarbon radical,
- R is a linear or branched aliphatic radical, cycloaliphatic radical, an aromatic radical, or a polymeric chain,
- A represents an amine or amine salt functional group, or an acid, ester, acid halide or amide functional group,
- B represents an amine or amine salt functional group when A is an acid, ester, acid halide or amide functional group, or B is an acid, ester, acid halide or amide functional group when A is an amine or amine salt functional group,

and at least one bifunctional monomer of the following formulae II to IV and optionally, a monofunctional monomer of the following formulae V or VI; or a prepolymer obtained from at least one bifunctional monomer of the following formulae II to IV and optionally, at least one monofunctional monomer of the following formulae V or VI,

- the bifunctional monomers satisfying the following general formulae:



- the monofunctional monomers satisfying the following general formulae;



in which

- A₁, B₁ may be identical or different and represent an acid, ester or acid chloride functional group, an amine functional group or an amine salt,

- R₃, R₄, R₅, R₆, R₇ represent aromatic, linear or branched, alkyl hydrocarbon radicals or alkylaryl, arylalkyl or cycloaliphatic radicals optionally including unsaturated groups;

wherein a molar ratio of the multifunctional monomers of formula I to a sum of the difunctional monomers of formulae II, III, IV and monofunctional monomers of formulae V and VI is between 0.01 and 5.